Connections between Central Asia and the Northern Littoral of the Black Sea: the Evidence from Objects with Tamgas

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The article by Bella I. Vainberg and Eleonora A. Novgorodova (1976) regarding parallels between Mongol and Sarmatian signs and tamgas has been well known and much cited for nearly four decades. In searching for the original home of the nomads who participated in the formation of middle Sarmatian culture and in attempting to resolve the problems of Alan ethnogenesis and Sarmatian-Chinese cultural connections, scholars invariably turn to the conclusions of that work, which are now regarded as a "classic" (Yatsenko 1993, pp. 63, 64, Fig. 2; 2001, pp. 27, 28, 105; Tuallagov 1994, p. 62; Skripkin 2010, p. 165; Simonenko 1999, p. 114; 2003, p. 56; Shchukin 2005, p. 67).

The overwhelming majority of Central Asian parallels to the Sarmatian tamgas are to be found in the petroglyphs of Mongolia: the cliffs of the Tsagaan Gol region, Tevsh uul, Bichikt, Arshan-Khad (Vainberg and Novgorodova 1976, p. 69; Yatsenko 1992, p. 195; 2001, pp. 27, 28, 105; Okladnikov 1980, Tab. 95.12, 111.9, 154, 155; 1981, pp. 16, 57, Tab. 107, 108; Batbold 2011, pp. 96–99). The tradition of inscribing signs on objects in nature is also well known in the territory of Sarmatian culture of the first centuries CE: the caves of Ak-Kai I and II in the Crimea, the grotto on Kamennaia mogila hill on the northern littoral of the Sea of Azov, the cliff of Uitash in Dagestan (Solomonik 1959, pp. 113–20; Mikhailov 1994; Markovin 1970; 2006, p. 175; Yatsenko 2001, p. 63). That one can draw reliable analogies between tamgas and the traditional marking of objects in nature over such widely scattered territories goes without saying. But which manufactured objects with tamgas might we now add to the already known objects in nature? The list of the categories of manufactured objects with tamgas from the territory of Sarmatia is varied and includes horse harness, details of belt decoration, vessels, cauldrons, mirrors, whetstones etc. (Solomonik 1959, pp. 49–165; Yatsenko 2001, pp. 142, 143). In this regard, what do we find in the territory of Central Asia? This article attempts to answer that question.[1]

The last two decades have seen many publications with the results of excavations of Xiongnu monuments in Buriatiia and Mongolia; Xiongnu archaeology has advanced appreciably. The information in these publications makes it possible to distinguish several categories of objects with tamgas which, in my opinion, display convincing analogies with the Alano-Sarmatian monuments of the northern Black Sea littoral.

Vessels

In 2009 I attempted to explain the function of Sarmatian tamgas on vessels from middle Sarmatian culture (Voroniatov 2009). This category of objects turned out to be sizeable; in the great majority of cases, the tamgas were depicted on the exterior or interior surface of the bottoms of ceramic and metal vessels of various shapes. Among the Xiongnu artefacts discovered to date in Transbaikalia are a number of ceramic and wooden vessels with signs which may somewhat boldly be designated as tamgas.

1. In the materials from the Ivolga settlement (2nd–1st century BCE) of Tansbaikalia are fragments of the bases of ceramic vessels on whose exterior are depicted various signs. Except for a single seal with Chinese hieroglyphs (1st century BCE–2nd century CE) all the other signs have been interpreted as possible seals of the potters (Davydova 1995, p. 28, Tab. 38.7, 179; Kradin 2002, pp. 84, 85). Among them is a sign which can be termed a tamga [Fig. 1.1, next page]. On the territory of the northern Black Sea littoral the given sign is a component element of a tamga known on a wooden harp from a burial of the end of the 1st–beginning of the 2nd century CE excavated in 1918 not far from Olbia (Simonenko 1999, Fig. 7.33; Yatsenko 2001, Fig. 4.95). A closely related sign with an equivalent design is attested in the collection of tamgas compiled by E. I. Solomonik (1959, Tab., Nos. 151–154, 160) and V. S. Drachuk (1975, Tab. IX, Nos. 652–654, 680).

2. Among the artefacts from the settlement of Nizhnie Durëny in Transbaikalia is a fragment of the bottom of a vessel with the impression of a potter's wheel pin [Fig. 1.2] on which is a sign that is very well known on the territory of Mongolia and Sarmatia (Davydova and Miniaev 2003, Tab. 21.5). Since it is on the field of

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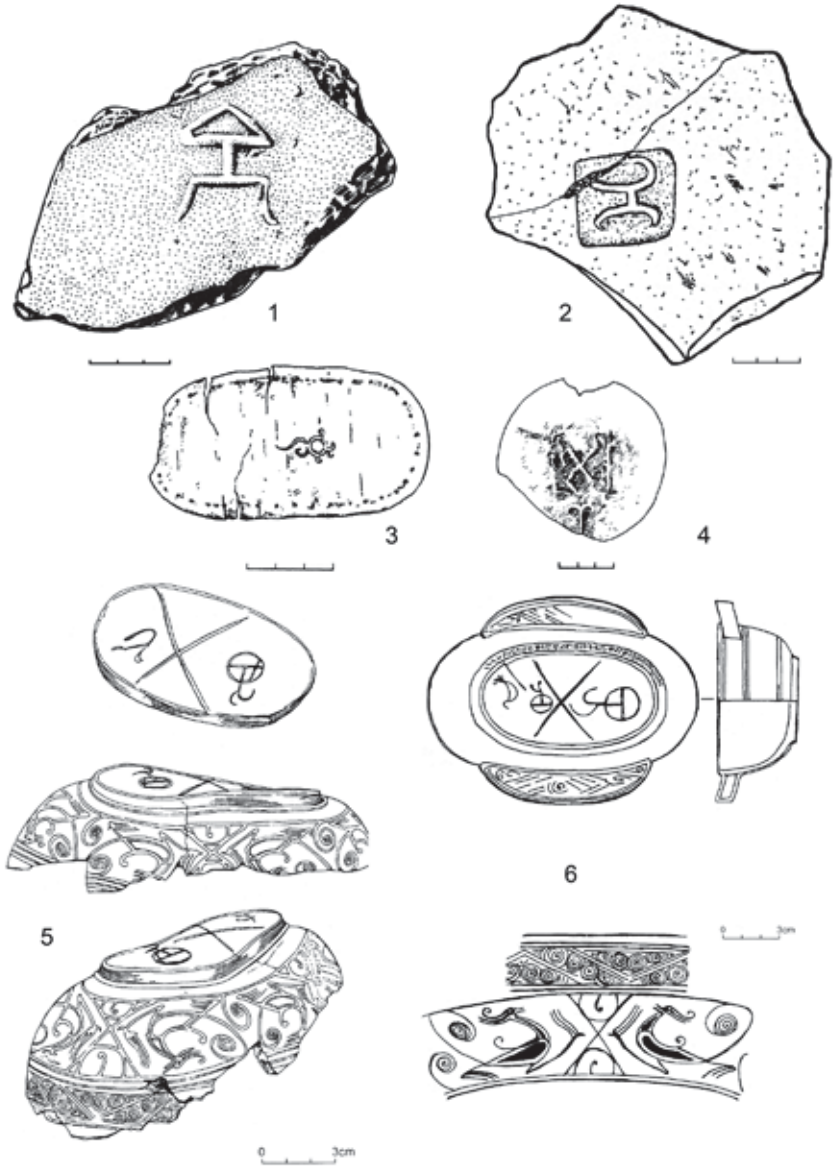


Fig. 1. Ceramic and wooden vessels from Mongolia and Buriatia: 1) Ivolga settlement (Davydova 1995, Tab. 179.7); 2) Nizhnie Durëny settlement (Davydova and Miniaev 2003, Tab. 21.5); 3) Tsaram Valley Barrow No. 7 (Miniaev and Sakharovskaia 2007, Fig. 3.3); 4) Grave No. 210, Ivolga cemetery (Davydova 1996, p. 74, Tab. 60.8a); 5, 6) Barow No. 20, Noyon uul cemetery (Polos'mak et al. 2011, Figs. 1.3; 2.2).

the impression made by the pin of the potter's wheel, it is logical to consider the sign to be the seal of the craftsman. However, given the absence of a series of ceramics with a similar seal and the presence of persuasive analogies to that sign in Central Asia and on the northern Black Sea littoral, I would suggest that this mark is in fact a tamga, depicted on the impression made by the wheel pin. A similar tamga in Sarmatia has been reliably connected with the clan of King Farzoi (49–70 [?] CE), who minted his own coins in Olbia (Karyshkovskii 1982, pp. 66–79; Shchukin 1982, pp. 35–38; Yatsenko 2001, pp. 48, 49).[2]

3. Artefacts from the Xiongnu complex of barrow no. 7 at Tsaram in the Kiakhta region of Buriatiia include the base of a birchbark box which is of interest for its depiction of a tamga (Miniaev and Sakharovskaia 2007, p. 164, Fig. 3.3) [Fig. 1.3].[3] The sign is fluid and rather complex. Even though there are many signs with a central element in the shape of a circle found on the territory of the northern Black Sea littoral (Yatsenko 2001, Figs. 4–7), I am unaware of any precise analogy.

4. The complex of Grave No. 210 in the Ivolga cemetery yielded fragments of a ceramic vessel, on the bottom of which are two signs [Fig. 1.4] (Davydova 1996, p. 74, Tab. 60.8,8a). The shape of the signs resembles certain types of tamgas in the petroglyphs of Tevsh uul in the Gobi Altai (Okladnikov 1980, p. 44, Tab. 95.12) and in the corpus of Sarmatian tamgas of the northern Black Sea littoral (Yatsenko 2001, Fig. 6.84a,117; Voroniatov 2008, p. 349).

5. Among the rich materials of Barrow No. 20 in the Süzhigt Valley of the Noyon uul cemetery in northern Mongolia is a series of lacquered wooden vessels (known as ear-cups or "*bei*" cups). The year of manufacture (9 BCE) of one of these cups provides a *terminus post quem* for the construction of Barrow No. 20 (Chistiakova 2009, p. 65; 2011, p. 88; Miniaev and Elikhina 2010, p. 175). On the exterior surface of the bottom of these vessels [Figs. 1.5,6; 2.2], along with a large skewed cross and depictions of a bird, are incised tamgas of a single type (Polos'mak et al. 2011, Figs. 1, 2). Very similar signs are known among the petroglyphs of Mongolia (Yatsenko 1993, Fig. 2). On the territory of Sarmatia, the given type of tamga is rather widespread: in Barrow No. 48 between the Kazanskaia and Tiflisskaia *stanitsy* in the Kuban region (Gushina and Zasetskaia 1994, p. 50, Tab. 14.142), on a limestone slab from Pantikapaion (Drachuk 1975, Tab. XI, No. 832), etc. But one should note that the signs differ some in details. For example, among the tamgas of this type in the northern Black

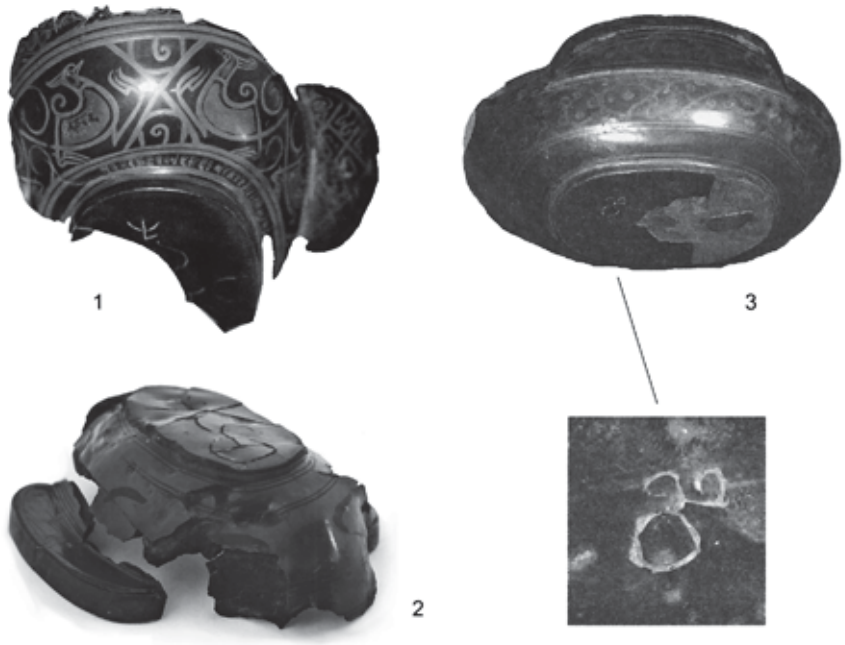


*Fig. 2. Wooden lacquer cups from Mongolia and Buriatia: 1) Unnumbered barrow, Zuramt Valley, Noyou uul cemetery (Miniaev and Elikhina 2010, Fig. 3.1); 2) Barrow No. 20, Noyon uul cemetery (*Treasures *2011, No. 262); 3) Süzhigt Valley, Noyon uul cemetery (Miniaev; Elikhina 2010, Figs 4, 2.6).*

Sea littoral I am unaware of any with lines inside a circular element.

6. An analogous lacquer cup with incised tamga on the exterior of the bottom [Fig. 2.1] is among the artefacts from the unnumbered barrow in the Zuramt Valley of the Noyon uul cemetery. The *terminus post quem* for the barrow is the date of the manufacture of the cup, 2 BCE (Chistiakova 2009, p. 67, Fig. 4; Miniaev and Elikhina 2010, p. 173, Fig. 3.1; Eröö̈l-Erdene 2011, p. 185, No. 263). I am unaware of any analogous tamga from the territory of Sarmatia.

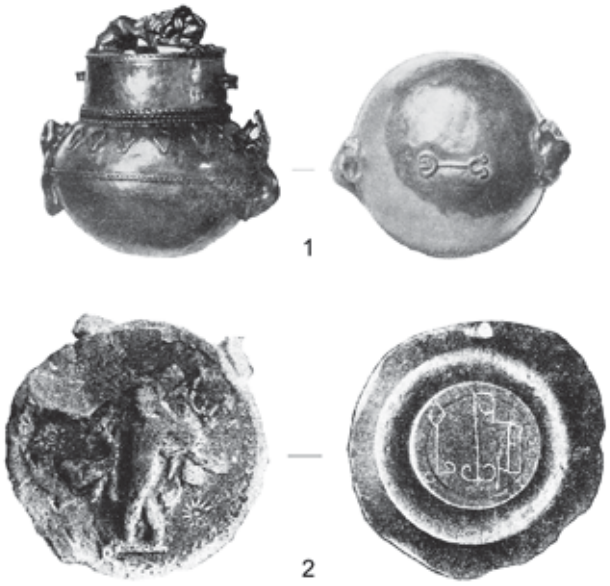
7. One more lacquer cup with a tamga incised on the exterior of its bottom [Fig. 2.3] comes from Barrow No. 23 in the Süzhigt Valley of the Noyon uul cemetery. The *terminus post quem* for the barrow in all probability is the last third of the first century CE (Miniaev and Elikhina 2010, pp. 174–75, Fig. 4.2,6). The tamga has very close analogues on the northern Black Sea littoral, in particular on a limestone slab from Pantikapaion (Drachuk 1975, Tab. XI, No. 832). The comparable signs differ only in the direction of the curls of the upper elements.

8. In the looted grave No. 24 of the huge burial complex No. 1 of the Gol Mod 2 cemetery in Mongolia was the base of a ceramic vessel with a tamga in relief in the form of a trident (Miller et al. 2008, p. 65, Fig. 5.2). A design like a trident is a component of a large number of tamga types in petroglyphs of Central Asia and among the materials of the northern Black Sea littoral (Yatsenko 1993, p. 63).

The number of "Xiongu" vessels with tamgas is by no means exhausted by the enumerated finds. One encounters in publications brief and preliminary information about vessels with signs resembling tamgas (Konovalov 1976, p. 198; Kovalev et al. 2011, p. 339).

Even on the basis of the selection here one can conclude that the Xiongnu had a tradition of inscribing tamgas on the base of vessels. The same tradition has been observed among the Alano-Sarmatians of the 1st and 2nd centuries CE (Voroniatov 2008, p. 348). The comparison extends as well to specific features which characterize that tradition. A certain number of the vessels with tamgas in the territories being compared are found in the richest burial complexes of the elite — the Xiongnu *shanyus* and the Alano-Sarmatian chiefs (Kradin et al. 2004, p. 14). Tamgas were inscribed not only on ordinary ceramics but also on valuable vessels. In Central Asia these were lacquer cups, whose manufacture by Chinese artisans was an unbelievably labor-intensive process (Polos'mak et al. 2011, pp. 330–31). On the territory of Sarmatia, such objects were expensive terra sigillata [Fig. 3.2] or gold, silver and bronze vessels

Fig. 3. Gold and ceramic vessels from the Northern Black Sea littoral: 1) Olbia (Scanlon 1961, Fig. 11.2,3); 2) Chersonesos (Shtaerman 1950, Fig. 1).



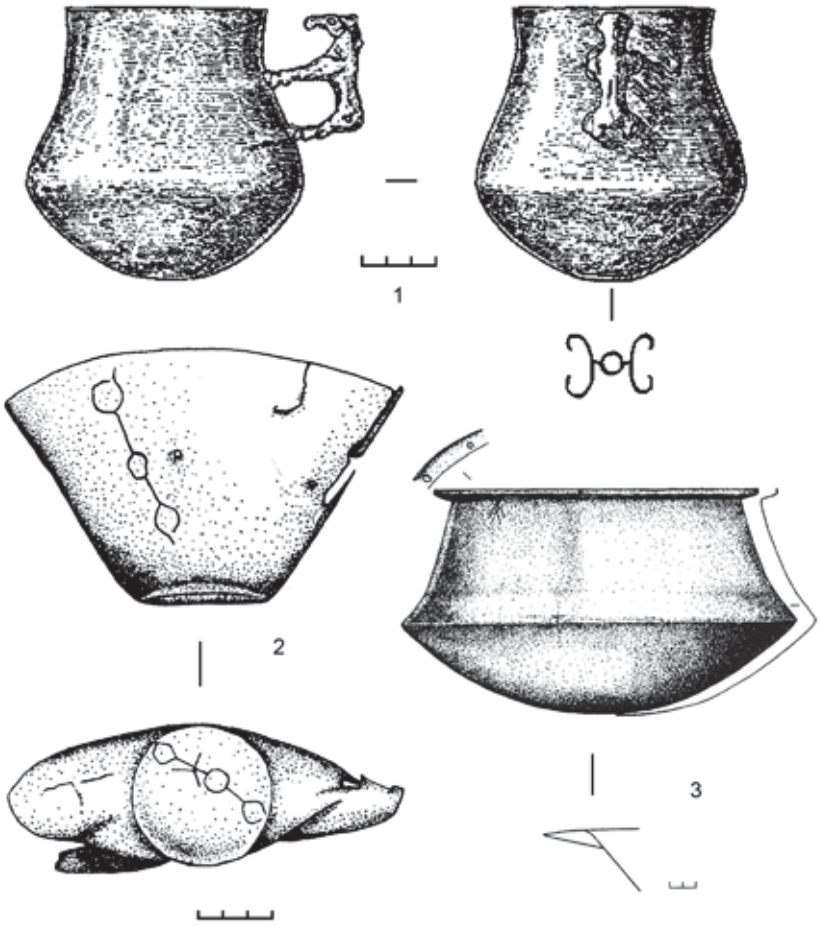


Fig. 4. Silver and bronze vessels from the Northern Black Sea littoral and the area between the Volga and Don rivers: 1) Grave No. 1 of Barrow No. 2 at the village of Porogi (Simonenko and Lobai 1991, Fig. 16.1,2); Grave No. 2 of Barrow No. 8 in the Berdiia cemetery (Sergatskov 1999, Fig. 1); 3) Kurgan No. 75 in the Zhutovskii cemetery (Sergatskov 2004, Fig. 4).

[Figs. 3.1 (and Color Plate II), 4.1-3, 4a, 4b] (Shtaerman 1950, p. 113, Fig. 1; Artemenko and Levchenko 1983, p. 147, Figs. 1.15, 2.8; Puzdrovskii 2007, Fig. 178.4,6; Simonenko and Lobai 1991, p. 28, Fig. 16; Simonenko and Raev 2009, pp. 65–69, Figs. 1, 2; Voroniatov 2009, pp. 92–95, Figs. 2, 3, 4).

Within these traditions are also some distinctions for which I am unable as yet to find an explanation. On vessels from Xiongnu sites, the tamgas, with the exception of one unclear instance of the birchbark box, are always depicted on the exterior of the bottom [Figs. 1, 2]. The tamgas on "Sarmatian" vessels in most cases are found on that surface [Figs. 3, 4] only when it was difficult to depict them on the interior (Voroniatov 2009, pp. 82, 83).

In a previous publication I proposed that the "Sarmatian" vessels with tamgas most likely were used in rituals of the nomads (Voroniatov 2009, pp. 83–92), a conclusion that may be extended as well to the "Xiongnu" vessels. I would add to this conclusion, presented in my work from 2009, one analogy which could strengthen it. B. A. Litvinskii (1982, p. 42) has provided interesting information about the use of cups in ritual practice: "A relic of ancient concepts and customs connected with cups is contemporary Iranian Zoroas-

Figs. 4a, b. Silver mug from a man's grave (No. 1), Barrow No. 2 at the village of Porogi, now in the Kraevedcheskii muzei in Vinnitsa; detail of the tamga on its bottom. This is the object depicted in Fig. 4.1. Photographs by the author.

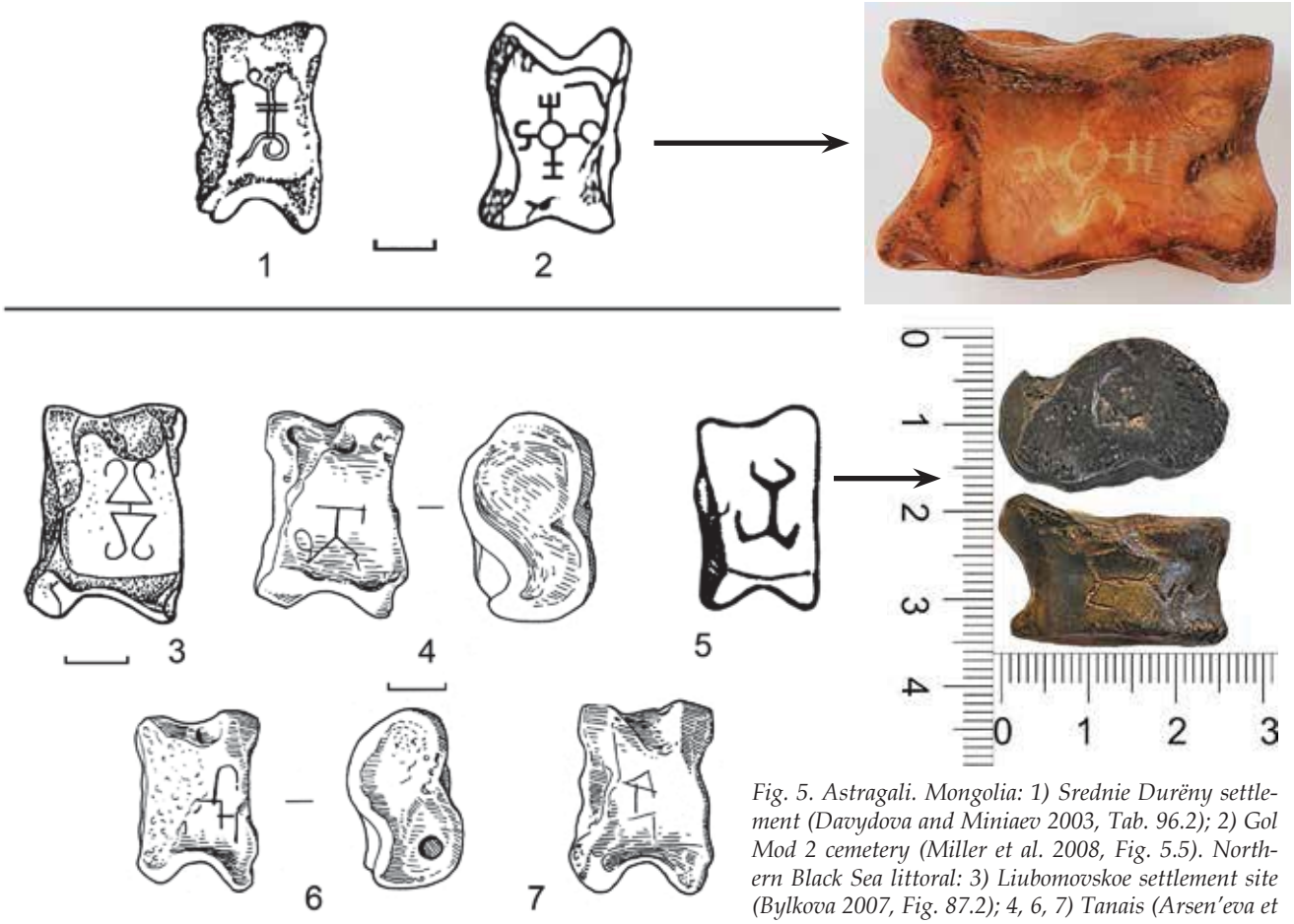


Fig. 5. Astragali. Mongolia: 1) Srednie Durëny settlement (Davydova and Miniaev 2003, Tab. 96.2); 2) Gol Mod 2 cemetery (Miller et al. 2008, Fig. 5.5). Northern Black Sea littoral: 3) Liubomovskoe settlement site (Bylkova 2007, Fig. 87.2); 4, 6, 7) Tanais (Arsen'eva et al. 2003, Abb. 12); 5) Artezian settlement (Vinokurov 2007, Fig. 2). Photographs of 5.2 and 5.5 by D. Erdenebaatar and N. I. Vinokurov respectively.

trians' use in commemorative observance of a bronze cup inside of which is engraved the name of the deceased friend or relative." Might it not be that "Xiongnu" and "Sarmatian" vessels with tamgas were used in commemorative rites before they were deposited in the burial inventory? Commemorative libations might precede the filling of the grave pit and the construction of the barrow. For the performance of the ritual they might incise the tamga of the one being buried on valuable vessels, and after the commemorative rites could place the vessels in the tomb.[4]

I would add to this comparison an observation by M. B. Shchukin, which also relates to vessels. In studying the problem of the early Alans, he compared ceramic vessels from Barrow No. 13 near the Kazanskaia stanitsa in the Kuban region with materials from the Ivolga settlement in Transbaikalia. While different in size, they are similar in form and ornament (Shchukin 1992, p. 114, Fig. 2; Yatsenko 1993, p. 63).

Astragali

This category of objects with tamgas is as yet infrequently found among Xiongnu antiquities but nonetheless merits attention. I know of only two instances of astragali with signs that can be termed tamgas among the numerous finds of astragali with and without incised depictions found in the Ivolga settlement and its cemetery, in the Xiongnu stratum of the Durëny settlement, in the burials of Il'movaia pad', and elsewhere[5] (Davydova 1995, p. 30, Tab. 184; 1996, Tab. 13.14, 37.9, 41.2–4,7,8,11; Konovalov 1976, p. 202, Tab. XVIII.1–7,9,10; Davydova and Miniaev 2003, p. 37, Tab. 93.6–11, 107.9–15):

1. In residence complex No. 5 of the Srednie Durëny settlement in Buriatiia was an astragalus [Fig. 5.1] with a tamga (Davydova and Miniaev 2003, Tab. 96.2), analogous to one known in petroglyphs in Mongolia (Vainberg and Novgorodova 1976, Fig. 7, Tab. II.59; Yatsenko 1993, Fig. 2). Component elements of this tamga are widely represented in designs of a large number of tamgas of Sarmatia in the first centuries CE.

2. In the inventory preserved from the looted tomb No. 3 of the huge burial complex No. 1 in Gol Mod 2 Cemetery in Mongolia is an unusually large collection of astragali (267 of them). On 36 of them were incised various symbols (Miller et al. 2008, p. 65, Fig. 5.5; Erdenebator 2011, p. 205, Fig. 3; Erööl-Erdene

2011a, p. 268, No. 397). Of particular interest is an astragalus with a sign that can be considered a tamga [Fig. 5.2]. I know of no exact analogy to this sign, but one should note that it recalls tamgas on Sarmatian mirrors of the type Khazanov-IX (Drachuk 1975, Tab. XVI.42,43,49,50; Yatsenko 2001, Fig. 18.14-19; Khazanov 1963, pp. 65-67).

The category of astragali with tamgas is well known from the northern littoral of the Black Sea.

1. An astragalus with a tamga [Fig. 5.3] (Bylkova 2007, pp. 99, 100, Fig. 87.2) was found in the ash layer of the Liubimov settlement of the lower Dnieper region. Scholars associate this find with the final stages in the life of the settlement, which burned during a hostile attack in the first centuries CE.

2. An astragalus with a tamga [Fig. 5.5] was found in the burned layer of the first half of the first century CE in the Bosporan fortress of Artezian. This find, and a fragment of a ceramic vase with tamgas from the same layer, have been interpreted as cult objects (Vinokurov 2007, p. 196, Fig. 2).

3. Four astragali, three of them with tamgas [Fig. 5.4,6,7], come from the complex of house No. 1 of structure No. 7, studied in 2002 in Tanais (Arsen'eva et al. 2005, Abb. 12.7,9.10).

4. Among various beads of the neck decorations of the buried woman in Grave No. 1 of Barrow No. 33 in the Valovyi-I cemetery on the lower Don were several gagate, coral and mother-of-pearl beads shaped like astragali (Bespalyi 2000, p. 162; Bespalyi et al. 2007, p. 78, Tab. 88.1*o*,*p*). On two of the gagate "astragali" is a sign shaped like the letter "N" (Bespalyi 2000, Fig. 3.10; Yatsenko 2001, pp. 142, 143, Fig. 6.30).

The tradition of using astragali in cultic practice and in games,[6] which scholars believe were organically connected in antiquity, is known from the Eneolithic period and was widespread in pastoral societies of various parts of Eurasia over the course of millennia (Klein 2010, pp. 322–35; Konovalov 1976, p. 203; etc.).

Prior to the appearance in the northern Black Sea littoral of Sarmatian tribes, sheep astragali and their imitations with inscriptions and marks are known among the materials of the Greek city colonies and their necropolises — Olbia, Chersonesos, Pantikapaion, Myrmekion, etc. (Rybakova 2007; Kalashnik 2010). As the complex phenomenon of Sarmatianization of the Bosporus developed beginning at the turn of the Common Era (Desiatchikov 1974, pp. 18–21), astragali began to appear on the northern Black Sea littoral. Apparently this tradition of depicting specifically Sarmatian tamgas arrived in the given territory with a new wave of nomadic tribes during the first century CE.

Depictions of animals with a brand and the tradition of branding cattle

The tradition of branding horses among the Inner Asian nomads is reliably documented in the section entitled "Tamgas of the horses of vassal principalities" in such Chinese sources as the *Tang Huiyao* (唐会要) of the 8th–10th centuries. Its information embraces the period from the beginning of the 7th to the beginning of the 9th century CE and consists of a list with brief practical characterizations of various tribes' horses which were imported into China. All the descriptions conclude with depictions of the tamga with which the given tribe branded its horses (Zuev 1960, pp. 93–97). Although the source contains information about Turco-Mongol tribes of the early Middle Ages, it seems important to note there was a tradition of branding horses in territories to the west and north of China. This practice might have a close connection with the Chinese practice of branding cattle (Zuev 1960, p. 96). Given the close interaction with the Xiongnu, one can suggest that such a widespread practice amongst the nomads was adopted as well by the Han Chinese.

In the context of the Central Asian custom of branding cattle, of interest is the recently published bronze buckle [Fig. 6.1] from a private collection, which, judging from the information provided, came from Arvaikheer, Övörkhangai aimag, Mongolia (Erdenechülüün and Erdenebaatar 2011, No. 378). Framed in the buckle is a skillfully delineated fantastic beast which the publication identifies as a dragon, although its exact identity is less important than the fact that it is a so far unique example of a fantastic creature with a tamga-brand depicted on the shoulder-blade or shoulder. Such bronze belt plaques and their fragments with similar fantastic predators are well known from Xiongnu antiquities (Kiselev 1949, Tab. XXI.18; Devlet 1987, p. 224, Fig. 6.2; Miniaev 1998, p. 97, Tab. 81.8; Davydova and Miniaev 2008, p. 65, Fig. 60) and specifically in materials of Övörkhangai aimag in Mongolia (Odbaatar 2011, pp. 130–31, Nos. 163-64). Hence there can be little doubt about the chronological and cultural attribution of this poorly documented object. However, as is usual in such situations, one should not exclude the possibility that it is a modern fabrication. As far as I know, this is the only example of an object from the Xiongnu period with a depiction of a branded animal; so it is as yet premature to consider that there was an entire category of such objects among the Xiongnu.

In contrast, along the northern Black Sea littoral they are numerous. E. I. Solomonik's study on the branding of cattle there discusses two stone steles of the first centuries CE depicting riders on branded horses, a stone slab with a domesticated animal and a terracot-

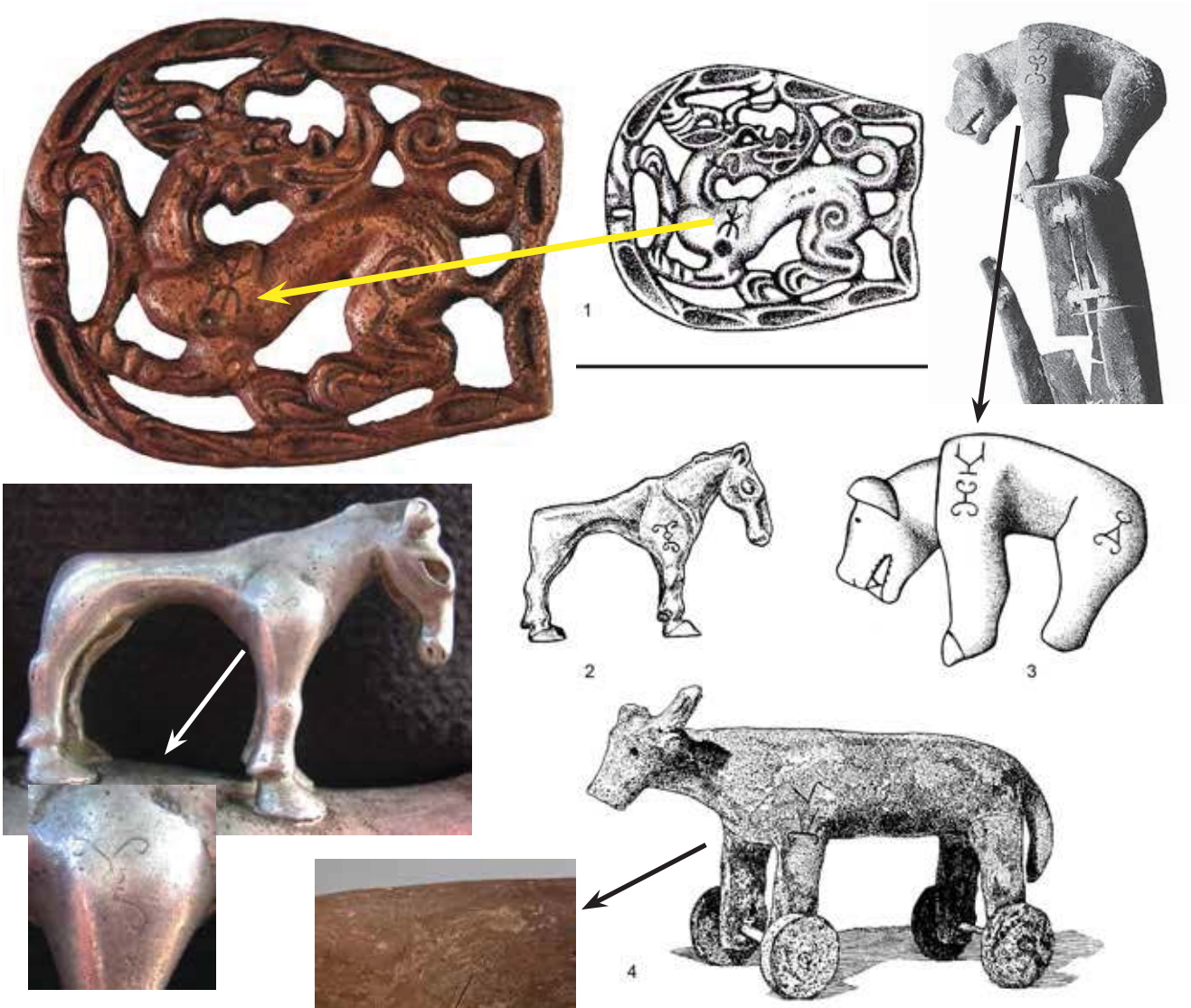


Fig. 6. Depictions of fantastic and real animals in metal, ceramic and wood. Mongolia: 1) Arvaikheer, Övörkhangai aimag (Erdenechülüün and Erdenebaatar 2011, No. 378). Northern Black Sea littoral: 2) Grave No. 1, Barrow No. 2, Porogi (Simonenko, Lobai 1991, Fig. 16.3); 3) from wooden harp found in burial near village of Kozyrka (?) (Simonenko 2004); 4) Grave No. 312, Kerch, in the Glinishcha district (Solomonik 1957, Fig. 2). Photograph of 6.2 by author; of 6.4 by Leonard Kheifets, Copyright The State Hermitage Museum, used with permission.

ta model of a bullock with a brand on its shoulder [Fig. 6.4] from a destroyed tomb of a child at Glinishcha in Kerch (Ben'kovskii 1904, pp. 65–67, Tab. VII.a,b; Solomonik 1957; 1959, pp. 26–27, 157–59).

Starting in the 1950s, the source base for the study of the branding of cattle has substantially broadened. One of the Sarmatian burials of the lower Don contained a unique instrument for branding an animal (Raev 1979, pp. 207–08, Fig 3.9; Yatsenko 2001, p. 12, Fig. 1.1). A male burial of the last quarter of the 1st century CE not far from the village of Porogi near the Dniester yielded a silver cup with a handle in the form of a horse with brands on the right shoulder and left flank [Figs. 3.1, 6.2]. In this same complex was a gold torque with ends shaped like horse heads. One of the heads has a brand on the cheek (Simonenko and Lobai 1991, Fig. 16.1,2; Simonenko 1991, p. 316, Nos. 154, 157). One should include here a long-known gold bracelet accidentally discovered on the shore of the Bug estuary. Its ends, analogous to those of the torque from Porogi, also are shaped like horse heads, on one of which is a brand (Solomonik 1959, pp. 131–32; Voroniatov 2013, Fig. 1.2). Additional evidence regarding the tradition of branding Sarmatian horses may be found in numerous examples of Roman-period ceremonial horse harness, whose decoration includes Sarmatian tamgas

(Voroniatov 2013). S. A. Yatsenko's idea (2001, p. 13) that details of horse gear can duplicate or imitate a real brand on the body of the horse merits close attention.

As unusual as the buckle from Mongolia is the depiction of a bear on a wooden harp [Fig. 6.3] from the interesting complex of the end of the 1st–beginning of the 2nd centuries CE not far from Olbia (Simonenko 1999, pp. 111–14, Figs. 2, 3; Simonenko 2004, pp. 209–21, Abb. 7). In toto there are 32 tamgas on the harp, six of which are incised on the figure of the bear. A. V. Simonenko emphasized (1999, p. 112) that the tamgas are placed in the same locations as the signs on the figure of a horse which served as the handle for the silver cup from Porogi [Figs. 3.1, 6.2].

I would propose that the depiction of a branded wild animal (a bear) on Alano-Sarmatian materials is related to the depiction of a fantastic animal with a brand in Xiongnu antiquities. It is possible that the meaning attached to signs specifically on such creatures relates to something other than the pragmatic tradition of branding cattle. This phenomenon, on which I will not dwell in greater detail, requires special study. I would merely note that early medieval depictions of wild animals and mythical creatures with a brand are attested in the territory of Inner Asia and Asia Minor (Boardman 2010, Fig. 19; Samashev and Bazylkhan 2010, p. 311).

In discussing the tradition of branding cattle along the northern Black Sea littoral, E. I. Solomonik (1957, pp. 215–17) provides information about this practice in archaic Greece, a practice which might well also have existed in the Greek Black Sea colonies. Clearly horses and cattle, branded with Sarmatian tamgas and, correspondingly, their depictions appear in the steppes of the northern Black Sea littoral and in the Bosporan region with the arrival of a new wave of nomadic tribes in the first century CE.

Conclusions

The objects examined here in the three categories demonstrate not only the similarity of several types of tamgas of Inner Asia and Sarmatia but also suggest common features of ritual practice among the Xiongnu and the Alano-Sarmatians. All three categories of objects have characteristics which are not merely the inherent qualities found in artefacts of daily life.

Along the northern Black Sea littoral are instances in which the indicated categories of objects may be juxtaposed in a single complex. For example, the grave inventory of the child's burial at Kerch, which has been mentioned, contained in addition to the terracotta figurine of a branded bull [Fig. 6.4] fragments of an analogous figurine and vehicle, on which were 21 sheep astragali (Ben'kovskii 1904, pp. 65–66). In my opinion, this complex most likely reflects some religious concepts of the nomads and of the sarmatianized population of the Bosporan region.

The astragalus with a tamga found in the burned layer of the Bosporan fortress of Artezian [Fig. 5.5] also has been interpreted as a cult object (Vinokurov 2007). In addition to the astragalus with a tamga, in the same layer of the Liubimov settlement on the lower Dnieper [Fig. 5.3] was a whetstone inscribed with three tamgas. Scholars have attributed a cultic and magic purpose to unusual whetstones of the Scytho-Sarmatian period and specifically to whetstones with tamgas (Griaznov 1961; Anikeeva and Iablonskii 2012, p. 52; Voroniatov 2012).

The important symbolic meaning of objects with tamgas has recently been noted for Xiongnu antiquities as well. The structure of Barrow No. 1 at Khökh Üzüüriin Dugui II in Mongolia had a so-called ritual compartment, in which were bronze vessels and a ceramic vessel with impressions of tamga-like signs (Kovalev et al. 2011, p. 339).

The indicated parallels among categories of objects with tamgas and especially their proposed ritual subtext enable one to establish a reliable connection between the Xiongnu and nomadic tribes which appeared on the northern Black Sea littoral in the first century CE. What contribution these new proofs of this connection may make to the discussion of Alan ethnogenesis and the emergence of middle Sarmatian culture is a complicated question. However, apparently in the Alan question one should pay more attention to the search for a Xiongnu component. Urals scholars have already convincingly accomplished this task for the later Sarmatian period (Botalov and Gutsalov 2000, pp. 145–84; Botalov 2003).

Studies which address the connections of the nomads of Central Asia and the northern Black Sea littoral contain some problematic assertions. At one time, S. A. Yatsenko, referring to the work of V. N. Poltoratskaia, wrote that the tradition of the inscribing of tamgas on ceremonial dishes was known among the Pazyryk people (Yatsenko 1992, p. 195). However, my own study of signs on objects from barrows of the early nomad period in the Altai failed to find such information. The only examples I could identify were two vessels of the Karasuk period found at Dyndybai in Central Kazakhstan (Poltoratskaia 1962, p. 83; Griaznov 1952, p. 136, Figs. 5.2,5,5a; 6, 7). There are doubts as well in the interpretation of numerous signs on wooden parts of horse harness from the Altai barrows (Poltoratskaia 1962). S. A. Yatsenko interprets them as tamgas (1993, Fig. 2; 2012, p. 206). This designation seems questionable, in that the shape of these signs is significantly different from that of the

signs in Mongolia and on the northern Black Sea littoral. Moreover, since these signs are inscribed on the reverse sides of wooden plaques, it is more likely that they are artisans' marks, as V. N. Poltoratskaia had believed (Poltoratskaia 1962, p. 87).

Of course these two observations do not minimize the significance of the Pazyryk factor in the discussion of the Alan problem (Raev 1984; 2009, pp. 263–64; Yatsenko 1993, p. 66). The important thing here is to recognize that the Pazyryk antiquities on which there are tamgas are not at all similar to the Xiongnu material. In this I support the observations of A. V. Simonenko (2003, pp. 55–57) and disagree with the opinion of S. A. Yatsenko (Yatsenko 2011, p. 206).

My views and those of A. V. Simonenko are also similar regarding the swiftness of the migration of those nomads who brought to the northern Black Sea littoral Central Asian elements (Simonenko 2003, p. 57). However, for a complete picture, it is necessary to study material from the regions between Mongolia and Sarmatian territory related to the subject of the parallels discussed here. For example, one cannot ignore the depiction of a branded horse on one of the remarkable Orlat plaques found on the territory of Uzbekistan (Nikonorov and Khudiakov 1999, p. 147, Fig. 3; Yatsenko 2000, p. 90, Fig. 2.b; Iliasov 2005, pp. 102–03). The Xiongnu designation of the recently discovered Orlat complex and materials of the Kul'tobe cemetery in southern Kazakhstan appears to be convincing (Podushkin 2012, pp. 31–49). Similar materials from the territory of Central Asia can establish the path and possible stages of the migrations which we as yet but poorly understand.

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Notes

1. I know of only one work (Kovalev et al. 2011, p. 339) which notes the necessity of studying Xiongnu tamga-like signs on various objects in the context of tamga-signs of Eurasia from the 2nd century BCE to the 2nd century CE.

2. Minor losses in the depiction of the sign on the fragment of the base of the vessel from Nizhnie Durëny [Fig. 1.2] might raise doubts about the accuracy of the comparison of the sign. Nonetheless I am inclined to think that the upper part of the sign is an incomplete but not closed oval.

3. It is not clear from the publication whether the tamga is on the interior or exterior surface.

4. Among "Sarmatian" vessels are examples where the tamga was not inscribed on the vessel after its production but was cast together with the foot (Simonenko and Raev 2009, p. 67, Fig. 2). This could be evidence that it was a ritual vessel ordered specially from the artisan.

5. We note that in the materials of the Dyrestui cemetery of Transbaikalia, only Grave No. 75 contained an astragalus (Miniaev 1998, p. 60, Tab. 56.2).

6. However, there are materials which contradict the hypothesis about an exclusively game function of astragali (Savinov 1996, p. 27).

– *Translated by Daniel C. Waugh*

Plate II

[Voroniatov, "Connections," p.27]

Gold vessel from Olbia on the Northern Black Sea littoral.
Photograph courtesy of the State Hermitage Museum, St. Petersburg.